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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/840,923	04/25/2001	Michael G. Foulger	2018.0060001	6526

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EXAMINER	
TANG, KENNETH	

ART UNIT	PAPER NUMBER
2195	

DATE MAILED: 07/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/840,923	FOULGER ET AL.	
	Examiner	Art Unit	
	Kenneth Tang	2195	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 April 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *27-44* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *27-44* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This final action is in response to the Amendment filed on 4/28/06. Applicant's arguments have been fully considered but are not found to be persuasive.

2. Claims 27-44 are presented for examination.

Response to Arguments

3. During patent examination, the pending claims must be "given their broadest reasonable interpretation consistent with the specification." *In re Hyatt*, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000). Applicant always has the opportunity to amend the claims during prosecution, and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. *In re Prater*, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969).

4. Applicant has attempted to comply with 35 USC 101 by amending the claim language to represent something tangible.

However, according to 35 USC 101, the claimed invention as a whole must be useful and accomplish a practical application. That is, it must produce a "useful, concrete and tangible result." State Street, 149 F.3d at 1373-74, 47 USPQ2d at 1601-02. The purpose of this requirement is to limit patent protection to inventions that possess a certain level of "real world" value, as opposed to subject matter that represents nothing more than an idea or concept, or is simply a starting point for future investigation or research (Brenner v. Manson, 383 U.S. 519, 528-36, 148 USPQ 689, 693-96 (1966)); In re Fisher, 421 F.3d 1365, 76 USPQ2d 1225 (Fed.

Cir. 2005); In re Ziegler, 992 F.2d 1197, 1200-03, 26 USPQ2d 1600, 1603-06 (Fed. Cir. 1993)). Claim 38 is directed to the result of execution of software code and is not a tangible result.

In addition, claims relating to a carrier wave are non-statutory. When nonfunctional descriptive material is recorded on some computer-readable medium, in a computer or on an electromagnetic carrier signal, it is not statutory since no requisite functionality is present to satisfy the practical application requirement. Merely claiming nonfunctional descriptive material, i.e., abstract ideas, stored in a computer-readable medium, in a computer, on an electromagnetic carrier signal does not make it statutory. See Diehr, 450 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an algorithm in Benson were unpatentable as abstract ideas because "[t]he sole practical application of the algorithm was in connection with the programming of a general purpose computer."). Such a result would exalt form over substance. In re Sarkar, 588 F.2d 1330, 1333, 200 USPQ 132, 137 (CCPA 1978) ("[E]ach invention must be evaluated as claimed; yet semantogenic considerations preclude a determination based solely on words appearing in the claims. In the final analysis under § 101, the claimed invention, as a whole, must be evaluated for what it is.") (quoted with approval in Abele, 684 F.2d at 907, 214 USPQ at 687). See also In re Johnson, 589 F.2d 1070, 1077, 200 USPQ 199, 206 (CCPA 1978) ("form of the claim is often an exercise in drafting"). Thus, nonstatutory music is not a computer component and it does not become statutory by merely recording it on a compact disk. Protection for this type of work is provided under the copyright law.

When nonfunctional descriptive material is recorded on some computer-readable medium, in a computer or on an electromagnetic carrier signal, it is not statutory and should be rejected under 35 U.S.C. § 101.

5. Applicant has successfully amended the claims to overcome the 35 USC 112, 2nd paragraph rejections.

6. *Applicant argues that the multi-point telephone conference coordinator of Wu does not indicate when a first program is to be executed on a first computer and when a second program is to be executed on a second computer.*

In response, the Examiner respectfully disagrees. Wu teaches that the coordinator is for a plurality of terminal devices *(col. 5, lines 45-67 and col. 6, lines 17-35)*. The coordinator coordinates when the terminal devices are being executed through its coordinator (master) schedule *(col. 5, lines 50-51, etc.)*. The scheduler in the coordinator/master is the master scheduler. In addition to Wu, Wookey teaches a master schedule via a master/slave networking system *(col. 2, lines 58-64)*.

7. *Applicant argues that Wu doesn't teach "requesting the first computer to execute the first program and requesting the second computer to execute the second program according to the updated master scheduler.*

In response, the Examiner respectfully disagrees. Wu teaches that the coordinator is for a plurality of terminal devices and it is interactive between the coordinator and the devices *(col. 5, lines 45-67 col. 2, lines 1-3, col. 3, lines 1-35, and col. 6, lines 17-35)*. The scheduler in the coordinator/master is the master scheduler. Wu teaches that the participants (computer terminals) are requested *(col. 5, line 49)*. Wu teaches generating telephone conference invitation and conference initialization based on the schedule information (which can be updated and altered) of the devices *(col. 3, lines 30-35)*.

8. Applicant argues that Wookey does not teach or suggest "updating a master schedule based on the first and the second notifications, wherein the updated master schedule indicates when the first program is to be executed on the first computer and when the second program is to be executed on the second computer."

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). It was shown in the rejection and above that Wu teaches the claimed limitation except having notifications for the master scheduler. However, Wookey teaches a remote computer monitoring system in a master/slave (master with a plurality of slaves/computers) configuration for the monitored computers based on an indication/notification of installation *(col. 2, lines 58-64)*. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the remote computer monitoring system in a master/slave configuration for the monitored computers based on an indication/notification of installation to the existing master computer network scheduling system of Wu because this would increase uptime and have higher productivity *(col. 3, lines 9-11)*.

9. Applicant argues that Wookey doesn't teach "requesting the first computer to execute the first program and requesting the second computer to execute the second program according to the updated master scheduler.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Wu teaches that the coordinator

is for a plurality of terminal devices and it is interactive between the coordinator and the devices *(col. 5, lines 45-67 col. 2, lines 1-3, col. 3, lines 1-35, and col. 6, lines 17-35)*. The scheduler in the coordinator/master is the master scheduler. Wu teaches that the participants (computer terminals) are requested *(col. 5, line 49)*. Wu teaches generating telephone conference invitation and conference initialization based on the schedule information (which can be updated and altered) of the devices *(col. 3, lines 30-35)*.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

10. Claims 39-44 claim a computer useable medium that is non-statutory because it is not necessarily tangible. In the Applicant's Specification, the computer useable medium can refer to a carrier wave or other signal *(page 19, lines 11-19)*.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. Claims 27-29, 32-35, 38-41, and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu (US 6,275,575 B1) in view of Wookey (US 6,085,244).

12. As to claim 27, Wu teaches a computer-based method of scheduling executions of programs on a plurality of computers *(see Abstract)* comprising the steps of, at a scheduling third computer:

(a) installing (set up and initiation) of a first program on the first computer *(col. 2, lines 43-52)*;

(b) installing of a second program on the second computer, wherein the operating system of the second computer is different from the operating system of the first computer (cross-platform) *(col. 2, lines 23-32)*;

(c) scheduling with a master schedule (multi-point telephone conference coordinator), wherein the updated master schedule indicates when the first program is to be executed on the first computer and when the second program is to be executed on the second computer *(col. 5, lines 45-63)*; and

(d) requesting the first computer to execute the first program and requesting the second computer to execute the second program according to the updated master schedule *(col. 5, lines 45-67)*.

13. Wu fails to explicitly teach having a master schedule based on the notifications. However, Wookey teaches a remote computer monitoring system in a master/slave configuration for the monitored computers based on an indication/notification of installation *(col. 2, lines 58-64)*. It would have been obvious to one of ordinary skill in the art at the time the invention was

made to include the remote computer monitoring system in a master/slave configuration for the monitored computers based on an indication/notification of installation to the existing master computer network scheduling system of Wu because this would increase uptime and have higher productivity *(col. 3, lines 9-11)*.

14. As to claim 28, Wu teaches wherein step (c) further comprises indicating in the master schedule that the execution of the first program depends on a condition; and step (d) further comprises requesting the first computer to execute the first program upon the occurrence of the condition *(col. 8, lines 53-62)*.

15. As to claim 29, Wu teaches wherein step (c) further comprises indicating in the updated master schedule that an execution of the second program depends on an execution of the first program meeting a criterion; and step (d) comprises:

(1) requesting the first computer to execute the first program;

(2) receiving a result (entering PIN, for example) from the first computer; and

(3) requesting the second computer to execute the second program if the result meets the criterion (executing if PIN is correct, for example) *(col. 3, lines 13-35)*.

16. As to claim 32, Wu teaches wherein step (c) further comprises accepting at least one command from a user to define the updated master schedule *(col. 3, lines 13-26)*.

17. As to claim 33, it is rejected for the same reasons as stated in the rejection of claim 27.

18. As to claims 34-35, they are rejected for the same reasons as stated in the rejections of claims 28-29.

19. As to claim 38, it is rejected for the same reasons as stated in the rejection of claim 32.

20. As to claim 39, it is rejected for the same reasons as stated in the rejection of claim 27.

21. As to claims 40-41, they are rejected for the same reasons as stated in the rejections of claims 28-29.

22. As to claim 44, it is rejected for the same reasons as stated in the rejection of claim 32.

23. **Claims 30, 36, and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu (US 6,275,575 B1) in view of Wookey (US 6,085,244), and further in view of Bowman-Amuah (US 6,606,660 B1).**

As to claim 30, Wu fails to explicitly teach the step of monitoring processor loading associated with the first and second computers and adjusting the executing sequence based on the processor loading. However, Bowman-Amuah teaches monitoring to provide load balancing over a network *(col. 92, lines 49-67)*. It would have been obvious to one of ordinary skill in the

art at the time the invention was made to include the feature of monitoring processor loading associated with the first and second computers and adjusting the executing sequence based on the processor loading to the existing system of Wu because it will help conserve resources, and therefore, increase throughput of the system *(col. 92, lines 65-67 through col. 93, lines 1-4)*.

24. As to claim 36 and 42, they are rejected for the same reasons as stated in the rejection of claim 30.

25. Claims 31, 37, and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu (US 6,275,575 B1) in view of Wookey (US 6,085,244), and further in view of Bauchot (US 5,970,062).

26. As to claim 31, Wu teaches a master table with associated process identifier but Wu and Wookey fail to explicitly teach wherein the master table includes a priority associated with each process identifier. However, Bauchot teaches a Master Scheduler based on priority *(col. 9, lines 52-54, col. 10, lines 3-11)*. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the feature of a Master Scheduler based on priority with the existing Master Scheduler of Wu in view of Wookey because for one, this would allow to distinguish processes, and second, this would ensure ordering that certain processes would occur first, and certain process would occur, second, etc. *(col. 10, lines 3-32)*.

27. As to claim 37 and 43, they are rejected for the same reasons as stated in the rejection of claim 31.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth Tang whose telephone number is (571) 272-3772. The examiner can normally be reached on 8:30AM - 6:00PM, Every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kt
6/29/06

SUPERVISORY PATENT EXAMINER